Botany of crop plants.—Robbins<sup>4</sup> has written a most successful botanical textbook with a direct bearing on agriculture, and it will be welcomed by many teachers in botany. The work is the outcome of a course in Freshman botany which the author has been giving for several years, and is intended for both agricultural and non-agricultural schools. It is divided into two parts. The first part consists of 8 chapters and includes general or fundamental botany. It is devoted entirely to angiosperms and would be somewhat better for a college textbook if more extensive. The second part gives excellent discussions of most of our important agricultural crops, including general descriptions of the plants, their flowers and fruits, with discussions of their history, uses, and distribution. Some of these discussions include maps and keys. Each chapter closes with an excellent bibliography. The value of the book would be greatly increased by laboratory outlines, by chapters on lower plants in the first part, and by chapters on plant breeding, forestry, plant pathology, and other related subjects in the second part.—Mel. T. Cook.

## NOTES FOR STUDENTS

Addisonia.—The third number of the second volume of this journal contains colored plates and popular descriptions of Harrisia gracilis, Epidendrum oblongalum, Aesculus parviflora, Micrampelis lobata, Bomarea edulis, Aster tataricus, Pachyphytum bracteosum, Harrisia Martini, Oncidium pubes, and Raphiolepis ovata.—J. M. C.

Subalpine plants of the Rocky Mountains.—Continuing his series of studies of the flora of the Rocky Mountains already noted,<sup>5</sup> RYDBERG<sup>6</sup> has made an analysis of the vegetation of the subalpine zone. Lists of species found in the different formations are given, and three classes are distinguished according to whether the plants are restricted to the northern or to the southern Rockies, or are common to both.—Geo. D. Fuller.

Revegetation of Taal volcano.—Swept bare of plants by an eruption in 1911, the slopes of Taal volcano have afforded an excellent opportunity for the study of revegetation within the tropics. Records by GATES<sup>7</sup> show that the grasses are prominent among the pioneers, followed by shrubs and small trees. In contrast with the conditions at Krakatau, ferns are found to be

<sup>4</sup> ROBBINS, W. W., Botany of crop plants. Philadelphia: P. Blakiston's Sons. 1917.

<sup>5</sup> Bot. Gaz. 62:83-84. 1916; 63:423-424. 1917.

<sup>&</sup>lt;sup>6</sup> RYDBERG, P. A., Phytogeographical notes on the Rocky Mountain region. VII. Formation of the subalpine zone. Bull. Torr. Bot. Club 44:431-454. 1917.

<sup>&</sup>lt;sup>7</sup> Gates, F. C., The pioneer vegetation of Taal volcano. Phil. Jour. Sci. 9:391-434. 1914.

\_\_\_\_\_, The revegetation of Taal volcano, P.I. Plant World 20:195-207. 1917.